### ENVIRONMENTAL

# Fact Sheet



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## DES Technical Guidance for the N.H. Drinking Water Source Protection Program

The Drinking Water Source Protection Program provides guidance and assistance to water suppliers and municipalities in protecting groundwater and sources of drinking water for public water systems. The emphasis of the program is on preventing the contamination of drinking water through the management of potential contamination sources located in drinking water source protection areas, and on protecting groundwater resources from over-use and other threats to sustainability.

This fact sheet describes DES technical guides and fact sheets designed to help water suppliers, municipal officials, and others understand the options for implementing local drinking water source protection programs and the requirements for certain related DES programs. All of these publications are available from the DES Public Information Center at (603) 271-2975. Most of them are also available through the DES website at <a href="www.des.nh.gov/dwspp">www.des.nh.gov/dwspp</a>.

#### **Technical Guides**

#### The DES Guide to Groundwater Protection, NHDES-WD-07-29

An overview of why New Hampshire's groundwater needs protection, what can be done on the local level (regulatory and non-regulatory options), and how a community can go about developing a groundwater protection program. Includes case studies and a list of additional resources. Useful for surface water source protection as well. 29 pages.

A Guide to Identifying Potentially Favorable Areas to Protect Future Municipal Wells in Stratified-Drift Aquifers (2 volumes), NHDES-WD-99-2 and 3

These two volumes describe a process for identifying areas within stratified-drift aquifers as potential future sites for community water supply wells. The first volume, written for planners, water suppliers, and town officials, explains the rationale behind this planning tool, which looks at the extent to which existing development constrains opportunities for siting new wells. The second volume, written for GIS (geographic information system) operators, gets into the nuts and bolts of the process. 35 and 60 pages, respectively.

Managing Groundwater Protection Areas: Guidance and Sample Letters, NHDES-WD-06-47 A step-by-step guide to conducting a drinking water protection program involving inspection of potential contamination sources. Includes flow charts and sample letters for notifying property owners before inspections and for following up inspections. 57 pages.

#### Model Groundwater Protection Ordinance, NHDES-WD-06-41

A model ordinance that prohibits eight high-risk land uses and requires others to conform to performance standards designed to minimize the risk of groundwater contamination. Includes a discussion of various approaches to local groundwater protection. Designed for protection of stratified-drift aquifers and/or wellhead protection areas. 109 pages.

### Model Health Ordinances to Implement a Wellhead or Groundwater Protection Program, NHDES-WSPCD-92-13

Two model health ordinances, along with a section-by-section explanation. Also includes a discussion of the advantages and disadvantages of various local regulatory approaches to managing potential contamination sources in source protection areas. 80 pages.

#### Model Rule for the Protection of Water Supply Watersheds, NHDES-WD-00-3

Offers sample provisions that can be incorporated into a rule to prohibit certain incompatible land and water uses on or near a surface water supply source. Includes a section on adapting the model rule to your surface water supply system's needs. 28 pages.

#### Enforcement of NHDES Water Supply Watershed Rules, NHDES-WD-06-40

This guidance document is intended to support the activities of local officials authorized by DES to enforce the provisions of Env-Ws 386. Because local officials and their duly authorized agents are acting as agents of DES when they enforce the rules, they must follow procedures consistent with those followed by DES personnel. These procedures are summarized in this guide. 75 pages.

Permanently Protecting Water Supply Lands with Conservation Easements, Society for the Protection of New Hampshire Forests, October 1997

Explains the link between land and drinking water protection, and the use of conservation easements to protect water supply lands, and includes two model easements - one for groundwater and one for surface water. 45 pages.

#### Managing Stormwater as a Valuable Resource, NHDES-R-WD-01-13

Focuses on ways to better manage stormwater (surface runoff) in order to protect important water supply resources. Advocates treatment and infiltration of stormwater where appropriate. Includes a discussion of what a local program should include. 80 pages.

#### **Fact Sheets**

#### Arsenic Removal and Disposal for Public Water Systems, WD-DWGB-3-22

Provides treatment options on how to remove arsenic in public drinking water systems and also addresses how to properly manage the arsenic residuals.

#### Delineating Wellhead Protection Areas, WD-DWGB-12-2

Provides an overview of the various methods for delineating wellhead protection areas and the circumstances under which each method is appropriate.

#### Performing an Inventory for Drinking Water Protection, WD-DWGB-12-3

Explains the steps in performing an inventory of potential contamination sources for a local source water protection program.

#### Phase II and V Source Protection Sampling Waivers, WD-DWGB-12-4

Summarizes the requirements and benefits of source protection sampling waivers, which enable

water suppliers to reduce monitoring frequency and save money by implementing source protection programs.

<u>Protection Programs Required for New Production Wells</u>, WD-DWGB-12-5 Summarizes the requirement for wellhead protection programs for siting new production wells serving community water systems.

Reviewing Files for Contaminated Sites for the Community Well Siting Process, WD-DWGB-12-6 Outlines the process of identifying and reviewing files for contaminated sites in wellhead protection areas for proposed new community water supply wells.

<u>Protecting Public Drinking Water Sources Based on Source Assessment Reports</u>, WD-DWGB-12-8

Provides an overview of the relationship between Source Assessment Report results and local protection approaches.

<u>Wellhead Protection Tips for Small Public Water Systems</u>, WD-DWGB-12-10 Provides six steps for small public water systems to follow in order to achieve wellhead protection.

<u>New Bottled Water Sources: How They Are Regulated in New Hampshire</u>, WD-DWGB-19-1 An overview of state regulatory requirements for obtaining approval for new bottled water sources.

#### The NH Groundwater Protection Act, An Overview, WD-DWGB-22-1

Profiles the N.H. statute that establishes both the groundwater classification system and best management practices for potential contamination sources.

<u>Local Reclassification of Groundwater to Implement Protection Programs, A Seven Step Process, WD-DWGB-22-2</u>

Explains the steps involved in reclassifying groundwater under N.H. Administrative Rule Env-Dw-901.

<u>Groundwater Reclassification and How It Affects the Property Owner</u>, WD-DWGB-22-3 Answers basic questions about the reclassification process and the requirements and responsibilities.

Best Management Practices (BMPs) for Groundwater Protection, WD-DWGB-22-4 Summarizes Administrative Rule Env-Wq 401, which applies to certain facilities handling larger-than-household quantities of regulated substances. The BMPs specified in the rules are common-sense practices designed to minimize the possibility of releasing regulated substances to the ground.

Source Control Programs Required for Infiltration of Stormwater at Industrial and Petroleum-Related Facilities, WD-DWGB-22-5

Describes source control programs that are required for projects involving direct infiltration of stormwater from areas where industrial or petroleum storage or dispensing activities will take place.

Best Management Practices for Fueling and Maintenance of Excavation and Earthmoving Equipment, WD-DWGB-22-6

Explains how the Best Management Practices for Groundwater Protection (Env-Wq 401) applies to earth moving and excavation operations.

#### Temporary Discharge Permits for Well Rehabilitation, WD-DWGB-22-7

Describes the requirements for temporary discharge permits, which are required when water containing treatment chemicals from well rehabilitation is discharged to the environment.

#### Holding Tanks for Floor Drains, WD-DWGB-22-8

Describes registration requirements for holding tanks that receive flow from floor drains in areas where "regulated contaminants" are used or stored.

# <u>Protecting Groundwater from Floor Drains & Other Typical Discharges</u>, WD-DWGB-22-9 Explains how groundwater protection rules apply to discharges of non-domestic wastewater to the ground. Some discharges must be registered; some require permits; and some are prohibited.

#### Wastewater Discharges from Vehicle Washing, WD-DWGB-22-10

Explains wastewater management options for facilities that wash vehicles on a regular basis.

<u>Large Groundwater Withdrawals Approval and Notification Requirements</u>, WD-DWGB-22-11 Explains the requirement for notifying municipalities and others, and obtaining DES approval prior to beginning any new groundwater withdrawals of 57,600 gallons or more per day.

### <u>Using Stratified-Drift Aquifer Maps to Plan for Potential Future Community Wells, WD-DWGB-22-12</u>

Explains the "Favorable Gravel Well Analysis," which uses a GIS to analyze stratified-drift aquifer mapping information so that the quantity and quality constraints to siting large new municipal wells in those aquifers can be understood. This method is intended as a planning tool to help municipalities and water suppliers determine appropriate groundwater protection strategies.

#### Groundwater Rights and Groundwater Protection Act, WD-DWGB-22-13

Addresses frequently asked questions about the public's right to use groundwater: Who owns groundwater? Who has a right to use it? Are there any restrictions on the amount of groundwater that can be withdrawn?

#### Wastewater From Drinking Water Systems, WD-DWGB-22-14

Summarizes the requirements for disposing of wastewater from drinking water systems to surface water or groundwater.

<u>Large Groundwater Withdrawal Permitting Process for Major Projects</u>, WD-DWGB-22-15 Summarizes the process and requirements for obtaining a permit for a large groundwater project withdrawing greater than 144,000 gallons per day.

### Maintenance and Decommissioning Requirements for Monitoring Wells Associated with Hydrogeologic Investigations, WD-DWGB-22-16

Explains the requirements for maintaining and decommissioning monitoring wells that might be contaminated.

### <u>Disposal of Backwash From Water Treatment Devices at Single Family and Duplex Residences</u>, WD-DWGB-22-17

Explains the process for the disposal of backwash from a water treatment system that is being used for a residence.

<u>Management of Carpet Cleaning Wastewater in New Hampshire</u>, WD-DWGB-22-18 Explains why carpet cleaning wastewater is managed and how a business should be discharging it.

FAQs Regarding Large Groundwater Withdrawal Permitting, WD-DWGB-22-19

Offers answers to frequently asked questions about the large groundwater withdrawal program. Questions address the following: permitting process, existing wells, monitoring and adverse impacts, surface water and wetlands, water quality, and planning and policy.

<u>Preventing Groundwater Contamination at Gas Stations – What Municipalities and Water Suppliers Can Do</u>, WD-DWGB-22-20 Explains options for municipalities and water suppliers on preventing groundwater contamination from gas stations.

Methods to Reduce the Concentration of Radionuclides in Drinking Water and Radionuclide Waste Disposal Criteria, WD-DWGB-22-21

Explains how to reduce the concentration of radionuclides and how to manage the wastewater generated by treatment methods.

Best Management Practices to Prevent the Contamination of Groundwater and Surface Water with Perchlorate When Discharging Fireworks, WD-DWGB-22-22

Explains how to minimize the impact to surface water and groundwater of discharging fireworks.

Water Efficiency Practices fact sheets, WD-DWGB-26-1 through WD-DWGB-26-17 Describes water efficiency practices to help save money, protect the environment, and conserve valuable water resources. The practices outlined in these fact sheets include domestic indoor use, outdoor use, xeriscaping, agricultural irrigation, golf courses, industrial facilities, sand/gravel operations, public water utilities, laundry facilities, snowmaking, aquaculture, institutions, health care facilities, and water audits for domestic and industrial users.

#### **For Additional Information**

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or <a href="mailto:dwgbinfo@des.state.nh.us">dwgbinfo@des.state.nh.us</a> or visit our website at <a href="mailto:www.des.nh.gov/dwgb">www.des.nh.gov/dwgb</a>. All of the bureau's fact sheets are on-line at <a href="https://www.des.nh.gov/dwg.htm">www.des.nh.gov/dwg.htm</a>.

Note: This fact sheet is accurate as of January 2007. Statutory or regulatory changes, or the availability of additional information after this date may render this information inaccurate or incomplete.